

The pioneer attempt to calculate in specific figures the deaths in the United States directly or indirectly due to Alcohol. Price, \$2 per copy, substantially bound in cloth.

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# The Mortality of Alcohol

A Statistical Approximation of the Deaths  
in the United States in Which Alcohol  
May Figure as a Causative or  
Contributory Factor

By

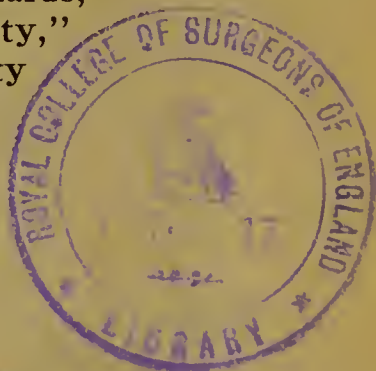
EDWARD BUNNELL PHELPS, M. A., F. S. S.

Author of "War Risks," "Tropical Hazards,"

"A Statistical Study of Infant Mortality,"

"Nine Years of American Mortality  
Statistics," "Neurotic Books and

Newspapers as Factors in  
the Mortality of Suicide  
and Crime," etc.



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with the Rev. Mr. Reisner's "estimate" of 44 per cent. and Mr. Reid's "estimate" of nearly 17 per cent. for the United Kingdom. The specific figure of about 66,000 deaths arrived at by Mr. Phelps rests on the solid basis of *averages* of the percentage estimates of the distinguished Medical Directors of three American insurance companies, namely, Dr. Brandreth Symonds, of the Mutual Life Insurance Company of New York; Dr. Eugene L. Fisk, of the Postal Life Insurance Company; and Dr. William L. Gahagan, of the United States Casualty Company, all of whom have long given especial attention to the relation of alcohol and insurance risks. These authorities having independently named the percentages of male deaths at adult ages in each of 106 causes of death in which alcohol directly or indirectly figures in their respective opinions, on the *average* of these estimates the number of male deaths in which alcohol presumably figures is computed, and with this figure as a basis the probable alcoholic mortality of the entire country is worked out by a series of carefully-explained statistical processes. Every step of the calculation is open to the sharpest analysis, and at least a starting-point for serious, scientific, discussion of the far-reaching subject has been established.

For twenty years Mr. Phelps has edited one of the leading insurance magazines of this country, "The American Underwriter," has compiled and published many statistical works on insurance and other topics, and is a Fellow of the Royal Statistical Society of London, and a member of the American Statistical Association and many other scientific societies of this country. At the invitation of the President of Section IX—Demography, of the Fifteenth International Congress on Hygiene and Demography, held at Washington, D. C., in September, 1912, Mr. Phelps prepared and presented at the Joint Session of Sections IV and IX (Hygiene of Occupations, and Demography) a paper on "The Mortality from Alcohol in the United States—The Results of a Recent Investigation of the Contributory Relation of Alcohol with Each of the Assigned Causes of Adult Mortality." This paper and the accompanying tables are published in the voluminous Transactions of the Congress, and the pioneer work on "The Mortality of Alcohol"

contains *many hitherto-unpublished tabulations of permanent value for reference purposes, thus making the book an indispensable accession to the bibliography of alcohol—and one of especial service to physicians, sociologists, ministers, and other writers and speakers on, and students of, the drink problem.* Copies of the work, measuring about  $9\frac{1}{2} \times 6\frac{1}{2}$  inches and substantially bound in cloth, will be promptly forwarded "on approval" to public libraries, or may be obtained by remittance of the price, \$2, to the

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## PRESS COMMENTS

Mr. Phelps's qualifications for statistical investigation will not be questioned by those familiar with his work as editor of "The American Underwriter," and as author of a number of books and pamphlets of a statistical nature.—*New York Times*.

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The editor of one of the leading insurance magazines of the country, Edward Bunnell Phelps, has provided the first statement based on scientific knowledge of the mortality in which alcohol directly or indirectly or even remotely figures. The book contains many tabulations of statistics.—*The Congregationalist* (Boston).

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Mr. Phelps made the pioneer attempt to calculate in specific figures the deaths in the United States directly or indirectly due to alcohol. His work has attracted very general attention in the domain of social economics, and has given him the highest reputation as an investigator and statistician.—*The Weekly Underwriter* (New York City).

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This monograph represents the first serious attempt to determine accurately the number of deaths for which alcohol is responsible annually in this country. Mr. Phelps is to be commended for having adopted so

reasonable and systematic a plan as a basis for his estimates. The figures reached appear to be far more trustworthy than any "guesses" hitherto advanced.—*New York Medical Journal*.

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The author is well qualified for such work, inasmuch as for over twenty years he has edited one of the leading insurance magazines in this country, and in other ways has maintained his interest in the cause of death. Taking into consideration the difficulties which enter into such calculations, it is probably a just estimate. The work is well done, and is an interesting contribution.—*The American Journal of the Medical Sciences* (Philadelphia).

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Quite recently Edward Bunnell Phelps, an insurance expert in mortality statistics, has put into book form the conclusions he draws from an exhaustive study of vital statistics. The figures compiled by Mr. Phelps and the deductions he makes from them will be of service to insurance authorities who are trying to get at the facts, and also to those who are interested in the sociological side of the subject.—Leading editorial in the *New York Commercial*.

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This is a statistical study in which the question is discussed from the standpoint of the statistician and actuary rather than from the standpoint of the physician. While under present conditions such estimates can at the best be only relatively correct, they are of the utmost interest and illustrate the necessity and importance of securing adequate registration of the causes of deaths for the entire country as soon as possible.—*Journal of the American Medical Association* (Chicago).

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Beside this forceful exposure of the waste of life through one preventable disease, one may well place the new study of "The Mortality of Alcohol," by Mr. Edward Bunnell Phelps, editor of *The American Underwriter* and a well-known statistician. This first effort in the United States to ascertain by statistical methods the probable deaths for which alcohol is wholly or partially responsible bears every evidence of careful, exact work within the limits laid down for the investigation, and affords a basis for further fruitful study of the question. The estimate represents the average of estimates made by medical directors of three large insurance companies based upon not only their insurance experience but upon hospital service and general practice.—*The Scientific Temperance Journal* (Boston).



This approximation is based on a careful and critical analysis of the mortality figures in this country for the year 1908, correlated with the expert opinions of three physicians chosen as medical directors of large American insurance companies. After reviewing the three similar investigations already made on the same subject in England, the author describes his methods of research and details the tabulated data on which his estimates are based. The methods of his investigation seem rational and its temper is entirely dispassionate, temperate and unbiased. His work is another example of the aid which life insurance may render to scientific medicine in the collection and interpretation of data, and to preventive medicine in the presentation and popular diffusion of knowledge about the causes of death and about faulty and hygienic modes of living.—*The Boston Medical and Surgical Journal*.

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There is no question that for men interested in insurance matters the problem of the "mortality of alcohol" is one of foremost rank, and it is to their credit that one of the best scientific studies of the matter that has yet appeared comes from one of their number. Mr. Phelps, who has published several statistical studies in similar fields, has taken the total adult mortality in the United States for the year 1908 as the groundwork of his study. His method was simple—he obtained from the medical directors of three large insurance companies their estimate of the percentage of male deaths between the ages of twenty and seventy-four, directly or indirectly due to alcohol, for each of the 106 causes of death listed in the Census statistics for that year. In defense of this method of study it may be granted that medical directors of insurance companies have much broader knowledge of the general subject of mortality and the effect upon it of certain specific causes than even the busiest and most prominent of practitioners of medicine. Moreover, the differences in the individual estimates were such as to lead to the reasonable conclusion that a poll of, say, several hundred physicians would not have resulted in a nearer *average* approximation than the average obtained from the poll of these three physicians only. Without going into minute analysis of the methods used by Mr. Phelps, we may state that to a disinterested mind his use of the statistical tables seems to be quite correct from the standpoint both of statistical science and of every-day methods of arriving at approximations. This, then, forms the first scientifically constructed approximation of the effect of alcohol upon mortality in this country. Mr. Phelps's study gives the firm foundation by which any future results of such activities may be studied and measured.—*The New York Medical Record*.

